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| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
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| 09/894,879 | 06/29/2001 | Paul Glatkowski | 38572.0024 | 4705 |

26633 7590 04/14/2003

HELLER EHRMAN WHITE & MCAULIFFE LLP
1666 K STREET,NW
SUITE 300
WASHINGTON, DC 20006

| EXAMINER |
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WYROZEBSKI LEE, KATARZYNA I

| ART UNIT | PAPER NUMBER |
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1714

DATE MAILED: 04/14/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/894,879

Applicant(s)

GLATKOWSKI ET AL.

Examiner

Katarzyna Wyrozebski Lee

Art Unit

1714

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 31 March 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 23-49 and 52-103 is/are pending in the application.
- 4a) Of the above claim(s) 55-75 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 23, 24, 26, 29-44, 46-49, 52, 76, 77, 79, 82-87, 89 and 91-101 is/are rejected.
- 7) ☒ Claim(s) 25, 27, 28, 45, 53, 54, 78, 80, 81, 88, 90, 102, 103 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☒ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

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In view of the newly submitted Information Disclosure Statement, the examiner of record hereby withdraws the finality of the office action and new prior art is applied.

In the light of the properly filed terminal disclaimer, Obviousness Double Patenting rejection is hereby overcome.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 23, 24, 26, 29-44, 46-49, 52, 76-77, 79, 82-87, 89, 91-101 are rejected under 35 U.S.C. 102(e) as being anticipated by Lavine (US 6,426,134) in view of evidence given in Newman (US 6,299,812).

The prior art of Lavine discloses composite comprising a polymer and single-wall carbon nanotubes (see Title).

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The composition of Lavine is utilized to make fibers, films and other articles (see Abstract) that have electric and magnetic properties (col. 1, lines 18-21).

The articles are form *via* extrusion by mixing polyethylene terephthalate (see example 4) with the nanotubes. Extruder will inherently impose a shearing force on the composite while mixing, and such would further align while passing through an orifice (col. 7, lines 41-43). Such alignment is perfectly illustrated in figure 1 of the US patent 6,299,812 incorporated hereby as evidence.

In example 4, the carbon nanotubes are utilized in an amount of 1 % by weight. They are further defined in the specification as having length of 10-300 nm and diameter of 1-2 nm. Since aspect ratio is a ratio of length to diameter, then the nanotubes of Lavine have aspect ratio of at most 300:1 (col. 2, lines 30-34).

Carbon nanotubes of the prior art of Lavine are not in touch with each other and they are uniformly dispersed in the polymeric matrix (col. 2, lines 35-37).

As it is stated in the beginning of this paragraph, the nanotubes of the prior art of Lavine are useful for its electric and magnetic properties. Since the composition of the prior art of Lavine has a polyethylene terephthalate polymer with 1 % loading of the single wall carbon nanotubes of aspect ratio, and all of which components are squarely in the middle of the numeric values of the present invention the electromagnetic properties of the composition, which include is absorption of EM radiation as well as its enhanced absorption due to alignment and generation of heat are all considered inherent, since they all are result of the components utilized in the composition.

In the light of the above disclosure, the prior art of Lavine anticipates requirements of claims rejected above.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Katarzyna Wyrozebski Lee whose telephone number is (703) 306-5875. The examiner can normally be reached on Mon-Thurs 6:30 AM-4:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (703) 306-2777. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9310 for regular communications and (703) 872-9311 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

KIWL
April 11, 2003

EDWARD J. CAIN
PRIMARY EXAMINER
GROUP 1500

